

# SEQUENCE LISTING

<110> Gordon-Kamm, William  
Lowe, Keith  
Sun, Yuejin  
Dilkes, Brian  
Larkins, Brian

<120> Cell Cycle Nucleic Acids, Polypeptides,  
and Uses Thereof

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ggcgttgcgt cag atg ggg aag tac atg cgc aag tgc agg ggc gcc gca      169
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ggc gcg gag gtc gcc gcc gtc gag gtt acg cag gtc gtc ggc gtc cgg      217
Gly Ala Glu Val Ala Ala Val Glu Val Thr Gln Val Val Gly Val Arg
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acg agg tcc agg tcc gcg gcg gcg acc ggc ggt gtc gcg aag gtc gcc      265
Thr Arg Ser Arg Ser Ala Ala Ala Thr Gly Gly Val Ala Lys Val Ala
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ccg agg agg aag agg gcg ccg gcg ggg gag cct gct gcc gcc gtg agc      313
Pro Arg Arg Lys Arg Ala Pro Ala Gly Glu Pro Ala Ala Ala Val Ser
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gct ggt ggg gac ggc gga agc tgc tac atc cac ctg cgt agc cgc atg      361
Ala Gly Gly Asp Gly Ser Cys Tyr Ile His Leu Arg Ser Arg Met
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ctg ttc atg gca ccg cct cag ccg cag ccg tcg gtt gac tcg gtt ccg      409
Leu Phe Met Ala Pro Pro Gln Pro Gln Pro Ser Val Asp Ser Val Pro
              80                85                90

acc ccg gtg gag gct gct gat ggc gct gca gga cag cag ggc gcg gcg      457
Thr Pro Val Glu Ala Ala Asp Gly Ala Ala Gly Gln Gln Gly Ala Ala
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gct gca gag gct ggc ggg gat cac gtc ctg gtg gat gtc tgc gcg gcg	601
Ala Ala Glu Ala Gly Gly Asp His Val Leu Val Asp Val Ser Ala Ala	
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Ser Asn Ser Gly Ser Gly Pro Asp Arg Glu Arg Arg Glu Thr Thr Pro	
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tgc agc cgg gcg cac ggc gag ctc agc gat ctg gag tgc gat ctg gcg	697
Ser Ser Arg Ala His Gly Glu Leu Ser Asp Leu Glu Ser Asp Leu Ala	
175 180 185	
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Gly His Lys Thr Gly Pro Ser Leu Pro Ala Ala Thr Pro Ala Ala Glu	
190 195 200	
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Leu Ile Val Pro Pro Ala His Glu Ile Gln Glu Phe Phe Ala Ala Ala	
205 210 215 220	
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Glu Ala Ala Gln Ala Lys Arg Phe Ala Ser Lys Tyr Asn Phe Asp Phe	
225 230 235	
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Val Arg Gly Val Pro Leu Asp Ala Gly Gly Arg Phe Glu Trp Ala Pro	
240 245 250	
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Val Val Ser Ile	
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Arg Ala Pro Ala Gly Glu Pro Ala Ala Ala Val Ser Ala Gly Gly Asp  
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Gly Gly Ser Cys Tyr Ile His Leu Arg Ser Arg Met Leu Phe Met Ala  
65 70 75 80  
Pro Pro Gln Pro Gln Pro Ser Val Asp Ser Val Pro Thr Pro Val Glu  
85 90 95  
Ala Ala Asp Gly Ala Ala Gly Gln Gln Gly Ala Ala Leu Ala Ala Gly  
100 105 110  
Leu Ser Arg Cys Ser Ser Thr Ala Ser Ser Val Asn Leu Gly Leu Gly  
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145 150 155 160  
Ser Gly Pro Asp Arg Glu Arg Arg Glu Thr Thr Pro Ser Ser Arg Ala  
165 170 175  
His Gly Glu Leu Ser Asp Leu Glu Ser Asp Leu Ala Gly His Lys Thr  
180 185 190  
Gly Pro Ser Leu Pro Ala Ala Thr Pro Ala Ala Glu Leu Ile Val Pro  
195 200 205  
Pro Ala His Glu Ile Gln Glu Phe Phe Ala Ala Glu Ala Ala Gln  
210 215 220  
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tcgaaaccct agcttgccca gccctccgg gcc atg ggc aag tac atg cgc aag 174  
Met Gly Lys Tyr Met Arg Lys  
1 5  
gcc aag gct tcc agc gag gtt gtc atc atg gat gtc gcc gcc gct ccg 222  
Ala Lys Ala Ser Ser Glu Val Val Ile Met Asp Val Ala Ala Ala Pro  
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ctc gga gtc cgc acc cga gcg cgc gcc ctc gcg ctg cag cgt ctg cag	270
Leu Gly Val Arg Thr Arg Ala Arg Ala Leu Ala Leu Gln Arg Leu Gln	
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Glu Gln Gln Thr Gln Trp Glu Glu Gly Ala Gly Gly Glu Tyr Leu Glu	
40 45 50 55	
cta agg aac cgg agg ctc gag aag ctg ccg ccg ccg ccg gcg acc acg	366
Leu Arg Asn Arg Arg Leu Glu Lys Leu Pro Pro Pro Pro Ala Thr Thr	
60 65 70	
agg agg tcg ggc ggg agg aaa gcg gca gcc gag gcc gcc gca act aag	414
Arg Arg Ser Gly Gly Arg Lys Ala Ala Glu Ala Ala Ala Thr Lys	
75 80 85	
gag gct gag gcg tcg tac ggg gag aac atg ctc gag ttg gag gcc atg	462
Glu Ala Glu Ala Ser Tyr Gly Glu Asn Met Leu Glu Leu Glu Ala Met	
90 95 100	
gag agg att acc agg gag acg acg cct tgc agc ttg att aac acc cag	510
Glu Arg Ile Thr Arg Glu Thr Thr Pro Cys Ser Leu Ile Asn Thr Gln	
105 110 115	
atg act agc act cct ggg tcc acg aga tcc agc cac tct tgc cac cgc	558
Met Thr Ser Thr Pro Gly Ser Thr Arg Ser Ser His Ser Cys His Arg	
120 125 130 135	
agg gtg aac gct cct ccg gtg cac gcc gtc cca agt tcg agg gag atg	606
Arg Val Asn Ala Pro Pro Val His Ala Val Pro Ser Ser Arg Glu Met	
140 145 150	
aat gag tac ttc gct gcc gaa cag cga cgc caa caa cag gat ttc att	654
Asn Glu Tyr Phe Ala Ala Glu Gln Arg Arg Gln Gln Gln Asp Phe Ile	
155 160 165	
gac aag tac aac ttc gat cct gca aac gac tgc cct ctc cca ggc agg	702
Asp Lys Tyr Asn Phe Asp Pro Ala Asn Asp Cys Pro Leu Pro Gly Arg	
170 175 180	
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Phe Glu Trp Val Lys Leu Asp	
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Cys	Ser	Leu	Ile	Asn	Thr	Gln	Met	Thr	Ser	Thr	Pro	Gly	Ser	Thr	Arg
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Lys Arg Arg	Gly Ala Ala	Gly Glu Gly	Val Ala Ala	Val Glu Val	Ser	
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cag gtc gtc	ggc gtc cgg	acg agg tcc	agg tcc gcg	gcg gcg acc	ggc	272
Gln Val Val	Gly Val Arg	Thr Arg Ser	Arg Ser Ala	Ala Ala Thr	Gly	
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ggc ggt gtc	gcg aag gtc	gct ccg ccg	agg agg aag	aag gcg ctg	ctg	320
Gly Gly Val	Ala Lys Val	Ala Pro Pro	Arg Arg Lys	Lys Ala Leu	Leu	
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ccc gcc gcg	aac gtg acg	acg tgc ggg	gag cct ggt	gcc gtg ggc	gct	368
Pro Ala Ala	Asn Val Thr	Thr Ser Gly	Glu Pro Gly	Ala Val Gly	Ala	
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Gly	Gly	Gly	Asp	Gly	Gly	Ser	Cys	Cys	Tyr	Ile	His	Leu	Arg	Ser	Arg		
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Met	Leu	Phe	Met	Ala	Ala	Pro	Gln	Gln	Gln	Pro	Ser	Ala	Ala	Leu	Thr		
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gcg	gct	ggc	ctc	tcg	cgt	tgc	tcc	agc	acg	gcg	tcg	tcg	gtg	gac	gtc	560	
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Asp	His	Val	Pro	Asp	Val	Val	Thr	Ala	Ser	Asn	Ser	Gly	Ser	Val	Pro		
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Asp	Arg	Glu	Arg	Arg	Glu	Thr	Thr	Pro	Ser	Ser	Ser	Arg	Ala	His	Gly		
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Gly	Glu	Leu	Ser	Asp	Leu	Glu	Ser	Asp	Leu	Val	Gly	Arg	Gln	Lys	Thr		
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Gly	Cys	Ser	Ser	Ser	Pro	Ala	Thr	Thr	Thr	Ser	Ala	Ala	Glu	Leu	Ile		
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gtg	ccg	cca	gca	cag	gag	atc	cag	gaa	ttc	ttc	gcg	gcc	gc			841	
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Arg	Lys	Lys	Ala	Leu	Leu	Pro	Ala	Ala	Asn	Val	Thr	Thr	Ser	Gly	Glu

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Pro	Gly	Ala	Val	Gly	Ala	Gly	Gly	Gly	Asp	Gly	Gly	Ser	Cys	Cys	Tyr
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Ile	His	Leu	Arg	Ser	Arg	Met	Leu	Phe	Met	Ala	Ala	Pro	Gln	Gln	Gln
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Pro	Ser	Ala	Ala	Leu	Thr	Pro	Val	Glu	Ala	Ala	Gly	Ala	Ala	Xaa	Gln
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Gly	Gly	Val	Val	Ala	Leu	Ala	Ala	Gly	Leu	Ser	Arg	Cys	Ser	Ser	Thr
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Ala	Ser	Ser	Val	Asp	Val	Gly	Gly	His	Ala	Cys	Arg	Ser	Asp	Ala	Ala
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Pro	Ala	Glu	Val	Asp	Gly	Asp	His	Val	Pro	Asp	Val	Val	Thr	Ala	Ser
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Ser	Ser	Arg	Ala	His	Gly	Gly	Glu	Leu	Ser	Asp	Leu	Glu	Ser	Asp	Leu
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Ser	Ala	Ala	Glu	Leu	Ile	Val	Pro	Pro	Ala	Gln	Glu	Ile	Gln	Glu	Phe
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Phe	Ala	Ala													
225															